



Citizens' Water Advisory Committee
P.O. Box 27210
Tucson, Arizona 85726-7210
(520) 791-4213
(520) 791-2639 (TDD)
(520) 791-4017 (FAX)

Citizens' Water Advisory Committee

MINUTES – November 4, 2009

The regular meeting of the Citizens' Water Advisory Committee was called to order by Sarah Evans, Chair, on Wednesday, November 4, 2009, at 7:05 a.m., in the Tucson Water Building, 310 W. Alameda, 3rd Floor Director's Conference Room, Tucson, Arizona.

1. Call to Order

Members Present:

Sarah Evans, Chair
Jim Barry
Thomas Meixner
Martha Gilliland

Mark Taylor
Jim Horvath
Tina Lee
Bruce Billings, Vice Chair
Vince Vasquez
Evan Canfield
Martin M. Fogel
Jeff Biggs, Tucson Water Director
Michael Gritzuk, Pima County Regional Water
Reclamation Department Director

Appointed by:

City Manager
City Manager
City Manager
City Manager Arrived: 7:10
Departed: 8:30

City Manager
City Manager Arrived: 7:10 a.m.
Ward 1
Ward 3
Ward 4
Ward 6 Arrived: 7:12 a.m.
Mayor
Ex-Officio Member

Ex-Officio Member

Members Absent:

Amy McCoy
Christopher Brooks

Ward 2
City Manager

Others Present:

Ivey Schmitz, Tucson Water Deputy Director
Chris Avery, Tucson Water Interim Deputy Director
Sandy Elder, Tucson Water Interim Deputy Director
Belinda Oden, Tucson Water Business Services Administrator
Mark Marikos, Senior Staff Technician, University of Arizona, Surface Water Working Group
Grant McCormick, Campus Planner, University of Arizona, Department of Planning, Design
and Construction
Fernando Molina, Tucson Water Public Information Officer
Pat Eisenberg, Tucson Water Planning & Engineering Administrator
John Thomas, Tucson Water Management Coordinator
Holly Lachowicz, Ward 3 Administrative Assistant
Tiki Lawson, Recording Secretary, City Clerk's Office
Deborah Keenan, Recording Secretary, City Clerk's Office

2. Announcements

None

3. Call to the Audience

No one spoke.

4. Approval of Minutes – October 7, 2009

Motion, duly seconded, to approve the Minutes of the October 7, 2009, meeting as presented, was carried by voice vote of 8 to 0 (Committee Members Canfield, Gilliland and Horvath absent).

5. Director's Report

a. Mayor and Council items

Jeff Biggs, Tucson Water Director, informed the Committee of upcoming Mayor and Council items.

- On November 9, 2009, a Consent Agenda item is scheduled regarding a proposed consultant study to determine the capacity of the City to wheel (convey) CAP water belonging to the Town of Oro Valley and Metro Water through the Tucson Water's treatment and distribution infrastructure and back to those utilities. The study would also determine the costs for doing so.
- On November 17, 2009, a Study Session item has been requested by Council Member Glassman and Vice-Mayor Romero to discuss the proposal from the Town of Marana to seek an appraisal of the Tucson Water infrastructure located within the Town as the first step in Marana's possible purchase of that infrastructure. This item was discussed by CWAC on October 7 and a motion approved by CWAC to recommend that the Mayor and Council proceed with the appraisal.

b. Other

Mr. Biggs stated he held his quarterly town hall meeting with Utility staff, at which time he gave updates to staff on the Utility's financial situation and the City's economic situation as well. He said these voluntary meetings give staff the opportunity to ask him questions and discuss issues.

6. Financial Update

a) Proposed changes to Tucson Water Miscellaneous Fees

b) Revised Financial Calendar

Belinda Oden, Tucson Water Business Services Administrator, distributed a booklet entitled "FY 2010 Miscellaneous Fees Study: Installation and Service Fees." Ms. Oden said that the Fee Study (which results in recommended fee adjustments) is conducted every other year. This biennial review is a result of an earlier CWAC recommendation not to have yearly fee increases in every category.

Ms. Oden explained the process by which the fee amounts were evaluated. The Study reviewed 110 existing fees, of which 52 fees are proposed to increase, 39 fees to decrease (primarily because of some reduction in average salaries due to retirements, and the rounding of fees to the nearest \$1 instead of \$5), and 19 fees to remain the same. In addition, 3 new fees are proposed relating to (1) tampering of water meters, (2) backflow prevention and reclaimed water service, and (3) isolating the fire protection water service (when a building does not have its own shut-off valve for its fire system and the building owner wants to perform system maintenance, Utility staff must shut off the fire service to the building from a valve in the street).

Ms. Oden said the Utility's Overhead Study was also updated during this time period. She stated the overhead rate remains the same since the 2006 Study, primarily because average salary costs have declined with retirements and are not expected to increase in the next two years.

Ms. Oden said that based on the estimated number of times these services are provided, the proposed fee changes would increase annual Utility revenue by less than \$100,000. Ms. Oden stated the CWAC Finance Subcommittee had already reviewed the proposed Miscellaneous Fees and voted to recommend their adoption to CWAC. Committee Member Horvath, Chair of the Finance Subcommittee, said the Subcommittee recommended adoption of the fees by a vote of 4-2.

Committee Member Barry moved to recommend that the Mayor and Council approve the FY 2010 Miscellaneous Fees as presented on pages II.1 through II.6 of the Tucson Water FY 2010 Miscellaneous Fees Study: Installation and Service Fees. The Motion passed by a roll call of 10 to 1 (Committee Member Vasquez abstained).

Ms. Oden handed out an updated Rate Process Calendar and explained that the only change was to delay presentation to CWAC of the preliminary Financial Plan to the December 2, 2009, CWAC meeting. She explained the Conservation and Education Subcommittee had looked at some changes in its recommendations regarding the shift in funding for the conservation program. This changed some of the demand projections that impacted the overall Financial Plan, which the Finance Subcommittee would review. CWAC could then vote at its January 2010 meeting to approve (or not) the Financial Plan for recommendation to the Mayor and Council. She said the rest of the Rate Process Calendar remained the same, and added that the Plan would be discussed with the City Manager's Office before CWAC received it.

Committee Member Canfield stated that the Conservation and Education Subcommittee had discussed the possibility of funding other items with Community Conservation Task Force (CCTF) funds.

7. Orientation Briefing: Tucson Water's Planning & Engineering Division, Engineering and Planning sections

Pat Eisenberg, Tucson Water Planning & Engineering Administrator, gave a PowerPoint presentation on the Utility's Planning and Engineering Division and where it fit within the Utility. She discussed the following sections of the Planning Division:

- New Area Development & System Planning
- Mapping & GIS
- Backflow Prevention & Reclaimed Water

Ms. Eisenberg then spoke about the following sections within the Engineering Division:

- Plant Design
- Distribution Design
- Construction
- Administrative & Project Support

She commented that the big story in engineering was planning for infrastructure replacement. She spoke about a recent national study that Tucson Water participated in that attempted to identify how much money was needed for replacement of failing utility infrastructure. She said there was a big construction boom after World War II when a lot of water pipes were installed. Much of that infrastructure is now approaching the end of its useful life. The Study produced "Nessie curves" (so named because of their similarity to the profile of the Loch Ness monster) that projected the annual rate of spending that was needed for infrastructure replacement in each participating utility. The Study suggests that Tucson Water should spend \$18 million in 2010 to replace infrastructure, but the Utility has never been able to spend to the level indicated in the Study.

Ms. Eisenberg concluded by discussing the Engineering Division's interaction with other divisions, such as Water Quality Management, Operations and Maintenance (O&M), Business Services, Customer Service and the Public Information Office (PIO). Further discussion ensued and questions were asked by several committee members. Mr. Biggs commented on the Utility's concern with future staff vacancies, as there were upcoming retirements.

8. Update: City-County Water / Wastewater Study Committee

Committee Member Barry said that staff had written a draft of their contribution to the final report. The Committee was now in the processing of writing its contribution. The staff's contribution would mainly be an action plan. He said the Committee had meetings scheduled for November 12 and 19, and December 3, 2009, in which to write the report. Mr. Barry added a facilitator had been hired to help wrap up the project by the end of the year.

Committee Member Barry added one of the most troublesome issues that came out of the project was a theme sought by the Mayor and Council regarding the definition of a sustainable water future. He thought it would be difficult to reach a unanimous consensus on the definition of sustainability. Nevertheless, after almost two years of staff and Committee work, the report should show a high level of agreement between the City and the County, and it was a real contribution toward the possibility of a regional dialogue.

9. Subcommittee Updates

Committee Member Canfield said the Conservation and Education Subcommittee met on October 28, 2009, and recommended to continue the conservation fee at 4 cents per Ccf of potable water sales. He said he had some concerns that there were some needs within the Utility that were not being met, and that possible use of CCTF funding for both conservation marketing and staffing would be discussed in the next year.

Committee Member Horvath said the Finance Subcommittee recommended adoption of the Miscellaneous Fees Study, and was in the process of reviewing the FY 2011 budget material.

10. Appointment of Nominating Committee

Chair Evans said she asked Committee Member Canfield to chair the Nominating Committee and requested those interested in serving on the Committee to contact Committee Member Canfield. The Committee was expected to bring back nominations at the next meeting.

11. Presentation: UA Campus Water Operations, Planning, and Sustainability Initiatives

Mark Marikos, University of Arizona Surface Water Working Group, Senior Staff Technician, gave a presentation on water use at the University of Arizona. He said the University's water system had grown from a small water system beginning in 1891 with one building to the current campus with over one hundred eighty buildings. He said geographically, it was still a small water system.

Mr. Marikos discussed several issues related to the University water system. It's defined as a non-community water system, but they try as much as possible to act like a community water system as there were people who lived on campus part of the year. Mr. Marikos said they were the only university in the state that had its own water system, because when the University started it was outside the Tucson city limits.

Mr. Marikos said growth was the biggest issue the University faced because of a limited resource. He stated there was rapid growth through the first and middle part of the century that had now leveled out. The issue was in how to maintain the ability to supply water to all University facilities. He said currently there were eight operating wells and one inactive well. He commented it was a priority for him to maximize the use of those wells due to finances. The cost differential between what the University paid for pumping the wells versus the cost of buying water made a significant difference in their budget. He said the difference, at present, if the University switched over totally to Tucson Water would be approximately \$ 1 million a year. Mr. Marikos also noted that as the aquifer below the University was pumped down, it became more expensive to pump, making the situation a balancing act. Currently, the University water demand is met about 70% from the University's own wells and 30% from Tucson Water. Recently, a new replacement well was installed at the corner of Park Avenue and Fourth Street. He commented that the University did not have enough of its own capacity for a peak summer day.

Mr. Marikos said there were seven points in their system from which to pull City water. He added one of the biggest issues that he dealt with was the problem of control. All eight wells and seven booster pumps currently operated autonomously. This caused difficulties during athletic events such as sewers overrunning. A centralized status system to control this was one of the big issues currently being discussed.

Mr. Marikos said another problem was in cooling the campus. Cooling water presented a number of different issues; reclaimed water was used for many years but there was a problem with phosphate that affected the chiller tubes and could potentially cause damage. He said the chilled water plant on campus was one of the most advanced in the world but in the summertime, if one chiller went down, buildings most likely had to be shut down in order to keep the system going. Mr. Marikos said this contributed to the decision to discontinue using reclaimed water. If the County got the phosphate levels under control, then the University could deal with it.

Mr. Marikos stated another issue was that the critical water uses on campus. Although the University did not currently supply the hospital, they did provide a backup connection. He said there was, however, a lot of important research on campus that relied on a dependable water

supply, as well as the use of water for generating steam. He said it was a diverse system with reclaimed water at approximately 11% – 13% of the total water used, and about 85% of the irrigation use on campus.

Mr. Marikos noted the University was looking at utilization of rainwater. Besides the passive rainwater harvesting currently being carried out, they were exploring the possibility of catching and using roof water. He said another source of water was condensate from rooftop air conditioning units. Mr. Marikos added there were a few possibilities for alternative sources of water, but it took time and money and was hard to justify running new pipes.

Mr. Marikos said one of the upcoming projects was to take the blow-down from the cooling towers for filtration to take out the phosphates; this would eliminate about 75% of the blow-down from the towers which would be a significant water savings. He concluded by saying they had not completely abandoned reclaimed water in the towers, but there were some issues that had to be solved.

Grant McCormick, Campus Planner with the University Department of Planning, Design and Construction, gave a presentation related to future planning which involved a bridge between the utility system and site water. He said he and Mr. Marikos were both part of the Surface Water Working Group and discussed the completion of its surface water master plan on campus with the intention of facility placement to mitigate major storm flows and to hold and manage stormwater on site.

Mr. McCormick said one of the things that happened when the plan was completed was that it led to other discussions on sustainability and the function of campus utilities. He said there were three major utility plants on campus; one of the views was that this water could be taken back and used to supply a number of industrial purposes. He discussed the benefits of different plans related to a variety of systems for reuse that could be implemented, such as use of air conditioning condensate.

Mr. McCormick compared the natural water cycle with a typical water engineer's diagram. He said a lot of the challenge to sustainability was trying to find a way to bridge the two systems. The challenge was figure out how certain settings could function with more natural processes on an ecological basis.

Mr. McCormick concluded by discussing water harvesting; he went over the University surface water flow patterns and changes to the landscape that were made in order to hold a hundred-year storm. He said the message was to do everything that could be done at every opportunity to hold water in the landscape. This provided a compelling reason to begin small scale harvesting wherever possible with new projects. Some of those campus projects included watersheds, cisterns, and specifically, the Architecture Building expansion water garden. There was the expectation that, over time, almost all the landscape water would be composed of the harvested water brought in either passively or through a tank. Questions were posed to Mr. McCormick and a short discussion ensued on the cost effectiveness of these and other projects. He reiterated that this view was not the final answer but what the University had on its campus was a good venue generating a lot of interest for joint discussion and questions that had not been previously asked.

12. Future Agenda Items

Chair Evans said financial items would be covered in the December 2, 2009 meeting.

13. Call to the Audience

No one spoke.

14. Adjournment: 9:02 a.m.